

**A Shared Vision for the
Twenty-First Century**

**Hawai'i State Hurricane Advisory Committee (HSHAC)
Strategic Plan
2007 - 2009**

**Department of Defense
Civil Defense Division
State of Hawai'i**

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Table of Contents

	Page
I. Introduction and Purpose.....	1
II. Vision Statement.....	1
III. Mission Statement.....	1
IV. HSHAC Strategic Goals.....	1
V. Summary.....	2
 Attachment - Hawaii State Hurricane Advisory Board (HSHAC) <i>Two-Year Plan, 2007 – 2009</i>	 3

I. Introduction and Purpose.

This two-year Strategic Plan for the Hawaii State Hurricane Advisory Committee (HSHAC) is based upon on the “Purpose” of the HSHAC as stated in Article II of the *“Bylaws of the Hawaii State Hurricane Advisory Committee (HSHAC).”* The “Purpose” is stated as:

“The HSHAC shall advise the office of the Director of Civil Defense, State Civil Defense (SCD) Division, on tropical cyclones related issues and matters listed below:

- A. Recommend initiatives pertinent to Civil Defense activities in hurricane planning, preparedness, mitigation, response and recover;
- B. Assist in directing and supporting funding recommendations for hurricane planning, mitigation, preparedness, education, and research programs;
- C. Gather information on hurricanes, hurricane hazards and risks; and
- D. Assist in the dissemination of information on hurricane hazards and mitigation measures.”

This Plan contains a vision, a mission statement, goals, and actions to meet the purpose of the Committee. It is a two-year plan of achievable actions that the HSHAC has committed itself to complete to assist SCD in those areas stated in the “Purpose

II. Vision Statement.

The State of Hawaii shall become fully prepared to meet the power and fury of hurricanes with no deaths and minimal damage.

III. Mission Statement.

To assist State Civil Defense in minimizing deaths, social impacts, and economic losses of the Hawaiian citizens and visitors when the next hurricane strikes Hawaii through planning, mitigation, preparedness, education, awareness, and research..

IV. HSHAC Strategic Goals.

In order to achieve the purpose of the Committee, the HSHAC Goals are:

- **Goal 1:** Identify and quantify tropical cyclone and tropical cyclone-related hazards, vulnerabilities, and risks in Hawaii.
- **Goal 2:** Evaluate and provide recommendations on Hawaii building codes pertaining to hurricane threats and on hurricane shelters.
- **Goal 3:** Develop and conduct State wide training programs and public outreach/awareness activities to disseminate information on hurricane hazards and mitigation.
- **Goal 4:** Provide tropical cyclone technical assistance and recommended initiatives pertinent to State Civil Defense Activities
- **Goal 5:** Provide assistance in directing and supporting funding recommendations for tropical cyclone planning, mitigation, preparedness, education, and research programs.

See attachment for 2007-2009 actions to help to achieve these goals.

V. Summary.

The HSHAC exists to support and advise Hawaii State Civil Defense on tropical cyclone related issues. Therefore this HSHAC Strategic Plan is founded on the Purpose described in the Committee's Bylaws and any other Hawaii State Civil Defense requested action. It is recommended that the status of the action items in this plan be reviewed at each quarterly meeting to ensure proper follow-up and completion. Also at the last meeting of each year, it is recommended that this document be reviewed and updated as required.

ATTACHMENT - HAWAII STATE HURRICANE ADVISORY BOARD (HSHAC)

Two-Year Plan 2007 – 2009

Goal 1: Identify and quantify tropical cyclone and tropical cyclone-related hazards, vulnerabilities, and risks in Hawaii.

<i>Item</i>	<i>Start date</i>	<i>Completion date</i>	<i>Status/remarks</i>
Conduct further parametric study of the HAZUS MH Hurricane module sensitivity and topographic effects, with the goal of developing modeling and operational guidelines for the use of HAZUS MH Hurricane in Hawaii	2006		Initial <i>Evaluation Study of HAZUS MH Loss Estimates for Hurricane Iniki</i> (NOAA PSC and Hawaii Office of Planning) Use the HAZUS MH white paper to maintain current status and Hawaii and Pacific needs
Create a Hawaii Building Inventory Database with relevant data for hurricane, flood, and earthquake loss estimation			Building inventory must include the single wall construction type and reflect accurate distributions of building types across the State, as well as Hawaii construction costs
Update information in the State Hazard Mitigation Plan pertaining to tropical cyclone-related hazards, vulnerabilities, and risks		July 2007	

Goal 2: Evaluate and provide recommendations on Hawaii building codes pertaining to hurricane threats and on hurricane shelters.

<i>Item</i>	<i>Start date</i>	<i>Completion date</i>	<i>Status/remarks</i>
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Develop island by island design maps and procedures for the building code that consider topographic wind effects caused by mountainous terrain			Honolulu implementation in the IBC 2003 Research begun for island of Hawaii in 2006 (Office of Planning and NOAA) Research in planning stages for island of Maui (Office of Planning and NOAA) Funding established for PDM project to implement topographic effects in Kauai Building Code, IBC 2006
Public Hurricane Shelter Criteria developed in compliance with the Disaster Emergency Preparedness Act of 2005	September, 2005	December 20, 2005	Ongoing effort by the Administration via DAGS to incorporate EHPA shelter criteria for new state construction
Antiquated PUC Design Standards for Power Distribution Poles and potential negative implications for post-hurricane response and recovery			General Order No.6 (G.O. 6) 1966 rules for overhead electrical line construction should be upgraded to the National Electrical Safety Code, using a modified effective wind speed map in amendments to Section 25 and 26, so that replacement and new poles and supporting structures will have adequate strength. GO-6 specified a "Light Loading" condition applied to facilities where the elevation above sea level is 6,250 feet or less. "A horizontal wind pressure of 8 psf (56 mph) on projected area on cylindrical surfaces, and 13 psf (71 mph) on flat surfaces shall be assumed."

Goal 3: Develop and conduct State wide training programs and public outreach/awareness activities to disseminate information on hurricane hazards and mitigation.

<i>Item</i>	<i>Start date</i>	<i>Completion date</i>	<i>Status/remarks</i>
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Loss Mitigation Grant Program for hurricane retrofits of homes Wind Resistive Device Technical Specifications Version 2.1 06-13-07	2006		State program funded and operational with first public briefing Honolulu Sept 23 2006; BIA home show Honolulu 1/25/07 Maui June 2, 2007 Kauai Hawaii (Hilo and Kona)
ATC 45 Post Hurricane Safety Evaluation of Buildings	April 26, 2006 Honolulu		John Knowland (City DPP) desires to have additional periodic training (ATC 45 and ATC 20) for City DPP and DCC employees
Hurricane Atlas (UH)			Use envisioned by NWS and SCD. Any public information uses?
Public information on alternative sheltering refuge building types			Current public shelters are insufficient for demand Possible interim evacuation needs to be prioritized or guidance suggested on alternative refuge that reduces risk
Standardized List of essential items to bring to a hurricane shelter			Included in the Hurricane Shelter Criteria Report as an exhibit; needs coordination amongst public information products

Goal 4: Provide tropical cyclone technical assistance and recommended initiatives pertinent to State Civil Defense Activities

<i>Item</i>	<i>Start date</i>	<i>Completion date</i>	<i>Status/remarks</i>
Provide Technical Expertise/Assistance			
ATC-45 Building safety inspections lists and call-up / deployment procedures need to be published and improved			Listing and Call-ups need to be better organized and made operational at SCD with redundancy (cannot single sourced to SEA OH) across the public and private sectors; demand after a hurricane will be much greater than after an earthquake
Special Needs Sheltering			Medical and Architectural expertise required currently lacking within HSHAC
Debris Impact and Cyclic Pressure Testing Facility (UH CE)	June 2007		Funding appropriated by legislature to SCD to create local testing facility, to be located within Diamond Head
Private Shelter Qualification Procedure			Procedures for submittal and county review of owner's documentation of the condition and integrity of private buildings for use as refuges
Identify those existing State buildings that have higher potential for compliance with hurricane shelter criteria			Based on design vintage and building structural system and occupancy type, exposure, and county, exterior wall type Hurricane Shelter Criteria Report identified benchmark design years

<p><i>Goal 5: Provide assistance in directing and supporting funding recommendations for tropical cyclone planning, mitigation, preparedness, education, and research programs.</i></p>

<i>Item</i>	<i>Start date</i>	<i>Completion date</i>	<i>Status/remarks</i>
Retrofit of existing buildings not originally designed as hurricane shelters			Limited scope for up to 32 DOE structures, primarily opening protection for Category 3 hurricanes (wind and impact)
Review State Hazard Mitigation Plan during the upcoming update cycle			Hurricane hazard, vulnerability, and mitigation projects to be updated and prioritized
Evaluate existing shelter inventory for planning purposes by county using the updated shelter criteria system			Public Hurricane Shelter Criteria developed in compliance with the Disaster Emergency Preparedness Act of 2005 Oahu and Maui have expressed interest in proceeding with evaluations over several years
Primary Health Care Facilities and Nursing Homes			Should be evaluated for possible service in place during a hurricane, rather than evacuation
Legislative Monitoring and Testimony		annual	Support good legislation and oppose flawed legislation; Support use of scientific and engineering-based criteria rather than political